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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,961	02/12/2002	Yoshiaki Moriyama	Q68491	2264

23373 7590 06/19/2006

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EXAMINER	
EDWARDS, PATRICK L	

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/072,961	MORIYAMA, YOSHIAKI	
	Examiner	Art Unit	
	Patrick L. Edwards	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23 and 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The response received on 04-28-2006 has been placed in the file and was considered by the examiner. An action on the merits follows.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 4, 11, 12, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 will be discussed as being representative of claims 11 and 19. The problems with the claim are as follows:

- The claim recites "said determined timing in previous content of said contents." No mention was made in the claim to a "previous content of said contents." It is therefore unclear what this "said determin[ation]" is referring to.
- The claim appears to have some timing problems. For example, the second paragraph recites setting a timing position in a previous set of digital contents. In the first paragraph (post-preamble), however, the claim puts itself in the context of "current content." It is unclear how a timing position can be set in a previous set of contents if that previous set of contents has already been read and we are now reading a current set of contents.

Claims 4, 12, and 20 are rejected because of their dependency on indefinite claims.

The examiner will do the best he can in interpreting the current claim 3 for purposes of anticipation. This interpretation—which goes along with a rejection of the claims—is provided in the below rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 9, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwab et al. (USPN 5,134,496).

Regarding claims 1, 9, and 17 (claim 1 will be referred to in its representative capacity):

Schwab discloses the following limitations:

- determining a timing before an end timing of said contents (see Schwab Fig. 2 and corresponding description: The reference shows an end timing position (i.e. the end of the video signal) and the reference further shows determining a timing position before that end timing position (i.e. the end of the trailing sequence...shown as line 227).).
- setting an end timing of said embedded digital watermark in said contents at said determined timing (see Schwab Fig 2: As was mentioned above, the spot that was "determined" is the spot that is used to insert the trailing watermark.).

Regarding claims 5, 13, and 21 (claim 5 will be referred to in its representative capacity):

The scope of claim 5 is substantially similar to that of claim 1. The only difference between claim 5 and claim 1 is that—in claim 5—the "determined position" corresponds to a position before a position where previous contents are switched to current contents. Schwab discloses this limitation because Fig. 2 (as described in col. 4 from lines 37 on) shows the encoding (embedding) of a watermark into a field. This process is repeated for future fields—which, when read, qualify as current contents making the previous field qualify as previous contents.).

Regarding claims 3, 11, and 19 (claim 3 will be referred to in its representative capacity):

The scope of claim 3 is substantially similar to that of claim 5. The only difference between claim 5 and claim 3 appears to be that claim 3 calls for the embeddign to be performed in previous contents, whereas claim 5 called for it to be performed in current contents. In light of the Schwab disclosure, this distinction is not significant. Schwab discloses embedding the watermark in multiple fields. Thus, for every "current content," there is a "previous content" which was embedded with watermark information.

Regarding claims 2, 4, 7, 10, 12, 15, 18, 20, and 23 Schwab does not disclose any delay time in reading the watermark. This makes sense, because the watermark is a "dropout", and is therefore read in real time with the reading of the video. It follows that difference between the set end timing position of the digital watermark and the end timing of the contents is greater than this delay.

Regarding claims 8 and 16, Schwab discloses embedding information that indicates that copying is prohibited (Schwab col. 5 lines 16-20 (and elsewhere throughout the specification).).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 6, 14, 22, 25, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Schwab et al. (as was applied above) and Yoshiura et al. (EP 1 006 722 A2). The arguments as to the relevance of Schwab et al. as applied above are incorporated herein.

Regarding claims 6, 14, and 22 Schwab does not disclose the "one copy" watermark, and therefore does not disclose all of the limitation of these claims. Yoshiura, on the other hand, discloses a "copy once" watermark, and further discloses that after the contents containing the "copy once" watermark are copied once, that a "no more copy" (NMC) watermark is embedded in a "start timing" of the next set of contents. Yoshiura discloses this, e.g., at paragraphs [0070]-[0074] (The reference describes embedding the PN sequence into the picture P1—which is obviously at the start timing of the new contents).

It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Schwab's copy prohibition method by adding a "copy once" feature as taught by Yoshiura. Such a modification would have allowed for customers to make a back-up copy of media that they had purchases. This is a beneficial system in that it remains consumer-friendly while preventing widespread piracy of the purchases content.

Regarding claims 25-27, Schwab does not disclose that the watermark is a pseudorandom noise generated watermark. However, Yoshiura does disclose this limitation throughout the specification (see, e.g., paragraph [0030] or paragraph [0075]).

It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Schwab's watermark insertion method by using a pseudorandom process as taught by Yoshiura. Such a modification would have allowed for a method of inserting/embedding a watermark that didn't deteriorate the quality of the image (see Yoshiura paragraph [0030]).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (571) 272-7390. The examiner can normally be reached on 8:30am - 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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